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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,578

04/08/2004

Lott Johnson

5115-001

8573

24112

7590

11/15/2006

COATS & BENNETT, PLLC

P O BOX 5

RALEIGH, NC 27602

EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,578

Applicant(s)

JOHNSON, LOTT

Examiner

Christopher Boswell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 3,016,968 to Lenz et al., in view of U.S. Patent Number 4,170,374 to Garcia.

Lenz et al. disclose the invention substantially as claimed. Lenz et al. disclose a vacuum actuated door latching assembly having a latch (figure 2) operatively associated with the door (1), a pneumatic actuator (26) operatively associated with the latch for causing the latch to move between the locked and unlocked positions, a vacuum line (37) connected to the pneumatic actuator and adapted to connect to a vacuum source (41) associated with the vehicle, and a control valve (39) disposed between the vacuum source and the pneumatic actuator for controlling the activation of the pneumatic actuator, as in claim 1. However, Lenz et al. does not disclose a biasing device engaging the door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) engaging a door (20) in the same field of endeavor for the purpose of biasing the door towards an open position (column 4, lines 37-44), where the biasing device has a spring (54), as in claim 6, where the spring is adapted to extend between a stop (74) disposed on the door and an area (42) adjacent the door,

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and wherein the position of the spring is adjustable with respect to the door (by adjusting the length of the shank 52), as in claim 7, where the spring is partially contained within a sleeve (50, i.e. a boot), as in claim 8, and wherein the spring is fixed to a bolt (52) that extends partially through the sleeve (portion of 50 that extends over the spring, figures 2 and 3), wherein Garcia does not disclose a threaded bolt, however, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the use of the shank to be threaded such that the threaded shank can move back and forth axially within a threaded support so as to adjust the position of the spring with respect to the door, which can be adjusted with respect to the door, as in claim 9. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. also discloses the latch having a locking lever (5) that is pivotally mounted and movable between a locked and unlocked position, wherein the pneumatic actuator includes an arm (30) that engages the locking member and moves the locking member in at least one direction between the locked and unlocked positions (column 2, lines 7-20), as in claim 2, as well as a conventional key lock (22) but wherein the pneumatic actuator is operative to actuate the latch independent of the key lock (column 1, lines 17-21), as in claim 3.

Lenz et al. further disclose the locking lever is of a generally L-shape and includes a terminal end portion (figure 2) that includes a catch (9) for engaging a receiver (4) secured to the door to be latched, as in claim 4, and further including a vehicle (3) having a load compartment (2) and a door (1) that permits access to the load compartment and wherein the latching assembly

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is mounted adjacent the door (figure 1) and wherein the vehicle includes an engine (column 2, lines 24-26) that serves as the vacuum source for actuating the pneumatic actuator, as in claim 5.

Lenz additionally discloses a vehicle having a vacuum actuated latch assembly for latching an access door to a load compartment (figure 1), comprising an engine (column 2, lines 24-26) for powering the vehicle, a compartment (2) for receiving and holding a load, a door (1) that pivotally or rotationally slides with respect to the compartment, for permitting access to the compartment of the vehicle, a vacuum actuated latch assembly (figure 2) for automatically unlocking the door, the vacuum actuated latch assembly having a latch (figure 2) operatively associated with a door for locking the door, the latch being movable between a locked and an unlocked position, a pneumatic actuator (26) operatively associated with said latch for causing the same to move between the locked and unlocked position, a vacuum line (37) connected to the pneumatic actuator and extending to the engine of the vehicle such that the engine of the vehicle serves as a vacuum source for the pneumatic actuator, and a control valve (39) disposed between the engine and the pneumatic actuator for controlling the actuation of the pneumatic actuator, as in claim 10. However, Lenz et al. does not disclose a biasing device engaging a door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) for engaging a sliding door (20) and biasing the door towards an open position (the spring force urges the keeper, an integral part of the door, toward the open position of the latch), the biasing device being spaced from the latch assembly (figure 2) and operable independently of the latch assembly (the biasing acts directly opposite and independent of the latching motion, wherein the spring biases the latch against the force of the door), and wherein the biasing device

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includes a spring (54) disposed adjacent the door and positioned with respect to the door such that when the door assumes a closed position, the spring engages the door and is compressed by the sliding door (column 4, lines 37-44), and wherein when the latch is moved from the locked position to the unlocked position the spring forces the sliding door to open (when the latch is moved from the locked position to the unlocked position, the force of the spring biases the door to an open position), where the spring is at least partially housed within an elongated sleeve (portion of 50 envelopes the uppermost portion of the spring) that is fixed adjacent the sliding door (figure 2), and wherein the spring is secured to a bolt (52), wherein Garcia does not disclose a threaded bolt, however, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the use of the shank to be threaded such that the threaded bolt can move back and forth axially within a threaded support so as to adjust the position of the spring with respect to the door, as in claim 21, in the same field of endeavor for the purpose of biasing the door towards an open position (column 4, lines 37-44). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. also disclose the pneumatic actuator includes a pneumatic cylinder (figure 2), as in claim 11, as well as the latch includes a locking lever (5) for engaging a receiver (4) secured to the door, and wherein the pneumatic actuator includes an arm (30) for engaging and moving the locking lever from a locked position to an unlocked position, as in claim 12, and where the pneumatic actuator can only be actuated to unlatch the latch when the engine of the vehicle is running (column 2, lines 21-29), as in claim 13, wherein the latch normally assumes a

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locked position, and wherein the arm that extends from the pneumatic actuator is operative upon the actuation of the pneumatic actuator to engage the latch and move the latch to the unlocked position (column 2, lines 29-44), as in claim 14,

Lenz et al. further discloses a method of unlocking a door to a load compartment of a vehicle by directing a vacuum from an engine of the vehicle through a line to a pneumatic actuator that is operatively associated with a latch that operates to lock the access door and which is movable between a locked position and an unlocked position (column 2, lines 21-29), utilizing the vacuum to actuate the pneumatic actuator and wherein the actuation of the pneumatic actuator results in the actuator engaging the latch and moving the latch from the locked position to the unlocked position, permitting the access door to open (column 2, lines 7-20), shutting the engine off, and closing the access door causing the latch to lock the access door (column 1, lines 45-49), as in claim 15. However, Lenz et al. does not disclose a biasing device engaging the door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) that biases a access door (20) towards an open position while the latch assumes the locked position and locks the access door closed (column 4, lines 37-44), wherein biasing the access door towards an open position includes securing a spring (54) adjacent to the access door and extending the spring to where the spring engages a stop (74) that extends from the access door such that the spring pushes on the stop and effectively biases the access door towards an open position (opposite motion of column 4, lines 37-44), and wherein the biasing of the access door towards the open position is independent of the latch that operates to lock the access door (the biasing acts directly opposite and independent of the latching motion, wherein

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the spring biases the latch against the force of the door), and wherein when the latch is moved from the locked position to the unlocked position, the spring causes the door to move towards the open position (the spring force urges the keeper, an integral part of the door, toward the open position of the latch) in the same field of endeavor for the purpose of biasing the door towards an open position (column 4, lines 37-44). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. additionally discloses actuating a control valve that is effective to permit the vacuum to reach the pneumatic actuator and wherein when the vacuum reaches the pneumatic actuator, the pneumatic actuator is actuated which results in the latch being engaged and moved to the unlocked position (column 2, lines 29-36), as in claim 18.

Lenz et al. also disclose the pneumatic actuator has an arm that extends past a portion of a locking lever that forms a part of the latch assembly, wherein the actuation of the pneumatic actuator causes the arm to move and to engage a portion of the locking lever which results in the locking lever being pulled from its locked position to an unlocked position (column 2, lines 7-20), as in claim 19, wherein the locking lever is pivotally mounted for movement about an axis and wherein the actuation of the pneumatic actuator causes the locking lever to rotate from a locked position to an unlocked position (column 1, lines 41-45), as in claim 20.

Response to Arguments

Applicant's arguments filed September 5, 2006 have been fully considered but they are not persuasive. In response to the argument the Lenz does not disclose a delivery vehicle having a load compartment and a sliding door, the examiner respectfully disagrees. The door of Lenz is rotationally slidable about the rotational axis, and thus a sliding door. Additionally, the inclusion of the limitation of the sliding door is taken as intended use of the vacuum actuated door latching assembly, where as Lenz contains all of the structural limitations of the vacuum actuated door latch.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the argument that there is no motivation for incorporating the biasing feature of Garcia in to the latching assembly of Lenz, the examiner respectfully disagrees. One with ordinary skill in the art at the time the invention was made would have known that a spring biasing feature could be used to lessen the amount of work needed to move the door from a closed position to an open position.

In regards to the argument that Garcia does not disclose the spring extending between a stop disposed on the door and an area adjacent the door, the examiner respectfully disagrees. As

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clearly shown in figure 2 of Garcia (sheet 2 of 3 of the drawings), the door (20) has a stop (74) incorporated thereon. Wherein, in an area adjacent the door (42), when the door is in the closed position, retains a stud that houses the spring (54). Furthermore, the spring is in a position that is between the area adjacent the door and the stop of the door, and thus extends between the door stop and the area adjacent the door, though not directly contacting the door stop.

Regarding the argument that there is no support for the spring being adjustable with respect to the door, the examiner respectfully disagrees. As stated in the office action mailed on April 4, 2006, the examiner states that it would have been obvious to one with ordinary skill to have the shank being able to move axially so as to adjust the position of the spring with respect to the door (pages 3-4 of the office action mailed on April 4, 2006), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

In response to the argument that Garcia does not disclose the spring at least partially contained within a sleeve, the examiner respectfully disagrees. As clearly shown in figures 2 and 3 of Garcia, a portion of the spring (uppermost portion) is contained within the rubber boot (50). Wherein a boot is defined as protective casing for something, and thus the boot of Garcia is substantially the same as the claimed sleeve.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

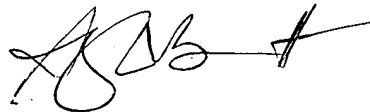
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (571) 272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Boswell
Examiner
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A handwritten signature in black ink, appearing to read 'SDB', followed by a horizontal line and a small flourish.

Suzanne Dino Barrett
Primary Examiner

CJB 
November 13, 2006